

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
10 February 2005 (10.02.2005)

PCT

(10) International Publication Number  
**WO 2005/012560 A1**

(51) International Patent Classification<sup>7</sup>: G01N 33/50, 33/68

C12Q 1/68.

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AB, AG, AI, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CI, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GI, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SB, SG, SK, SI, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(21) International Application Number:

PCT/CA2004/001413

(22) International Filing Date: 28 July 2004 (28.07.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/490,535

29 July 2003 (29.07.2003) US

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(71) Applicant (for all designated States except US): UNIVERSITÉ LAVAL [CA/CA]; Cité Universitaire, Québec, Québec G1K 7P4 (CA).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(72) Inventors; and

(75) Inventors/Applicants (for US only): PÉRUSSE, Louis [CA/CA]; 1579 du Parc Beauvoir, Sillery, Québec G1T 2M5 (CA). BOUCHARD, Luigl [CA/CA]; 880 Richelieu, Québec, Québec G1R 1K9 (CA).

(74) Agent: OGILVY RENAULT; Suite 1600, 1981 McGill College Avenue, Montreal, Québec H3A 2Y3 (CA).

WO 2005/012560 A1

(54) Title: OBESITY MARKERS AND USES THEREOF

(57) Abstract: The present invention relates to a method for identification of a nucleotide substitution in the gene encoding for the neuromedin- or quantifying its levels of mRNA, to allow the determination of the susceptibility or predisposition of a patient to obesity, or to disinhibition or susceptibility to hunger. Determination of the susceptibility or predisposition to obesity or to hunger disinhibition can alternatively be determined by the identification of an amino acid.